

Aero Design Ltd.**Work Order Control Sheet**Work Order#: 2017-109 Date Opened: 04 July 2017 Title: AssemblyAircraft OEM: Airbus Helicopters Aircraft Model: AS350 Product Type: Bike Rack Product Model: Base Rails Quantity: 24 LH / 24 RH**Work Order Contents**

Work Order/Build Sheets (Procedures Provided)
Additional Work Sheets (Standard Practice)
Drawings (See List Below)
Parts Distribution Sheet
Sub Component Tags
Completed Certification (Original)
Time Sheet (R&D)
Notes

Initial or N/A

DM
N/A
DM
DM
N/A
N/A
N/A
N/A

Build Sheet Contents

Tasks Initialled
Dual Inspections Initialled

Initial or N/A

JC
N/A

Drawing List

Drawing #	Rev #	Description	Initial or N/A
100215	0	Bike Rack Base Ass'y	DM

Traveller

Initial or N/A

Component Completion

Quantity Complete on This Work Order
Quantity Incomplete on This Work Order
Further Processing Required Before Release
Release to Stock as Components

As Instructed

28 LH/20 RH
N/A
N/A
N/A

Certification

Form One Completed
Serviceable (Green) Tag Completed
In Process (Yellow) Tag Completed
Unserviceable (Red) Tag Completed
Parts Placed in Stores for Distribution

Initial or N/A

N/A
N/A
N/A
N/A
JC

Additional Documentation

Documentation of a minor change
Non-Conformance Report Required
Service Difficulty Report Required

Initial or N/A

N/A
N/A
N/A

Billing

Local (Aero Design)
Research and Development
Third Party

Initial or N/A

JC
N/A
N/A

Work performed by:

Print: K. Bevans/J. ClarkeSign: [Signature]SCA: AD02Date: 09-Mar-18

ICC / Dual Inspection performed by:

Print: N/ASign: [Signature]SCA: Date:

Work Order closed by:

Print: J. ClarkeSign: [Signature]SCA: AD02Date: 14-Mar-18

Approved Manufacturing Facility 73-04

Form 20.0.03

Rev. Original 23 Sep 2014

WO# 2017-109

Jan 29, 2018
Jan 29, 2018
Jan 29, 2018

Aero Design Ltd.
Component Fabrication

100215-01 Bicycle Rack Base

Rails only

Work Order Number: 2017-109

Date: 4 July 17

Notes:

Drilling speed to 320 RPM.

Rapid Tap cutting fluid or equivalent coolant required

Rail

Tasks	SCA
1. Record material PO below	KB <i>gc</i>
2. Cut 78230 step extrusion to 82.75" in length	KB <i>gc</i>
On each end, cut the side and bottom walls shorter by 1/8" leaving the tread rail full length IAW drawing 100215 Detail B	<i>gc</i>
3. Deburr one end on buffing wheel	<i>gc</i>
4. On the bottom wall, place a mark 7/8" from each end and drill 3/8" hole which will act as a drain and allow ventilation during the welding process	KB <i>gc</i>

Manual Mill

5. While supporting the long end of the rail, clamp aft end (dependant on LH or RH) into the manual mill vice	KB <i>gc</i>
6. Using standard practices, zero off of the end and back of the part and set zero on the X and Y axis on the digital display	KB <i>gc</i>
7. Set table to drill locations IAW drawing 100215 Detail C and bore .75" holes	KB <i>gc</i>
8. Deburr edges and holes	KB <i>gc</i>

Welding

9. Wipe parts with Acetone or equivalent solvent	DRM
10. Place 100226-01 bushings in .75" holes and locate them IAW drawing 100215 Detail C	DRM
11. Weld IAW drawing 100215	DRM
12. Place cap 82720-04 on each end and weld IAW drawing 100215 Detail B	DRM

Beam

13. Cut 1" x 8" 6061-T6 extruded bar to 24 7/8" in length.	N/A
14. Install material in CNC mill ensuring RH edge overhangs for tool clearance	N/A
15. Set material stop to ensure subsequent steps and parts return to the same location	N/A
16. Load and run program 021 and 022	N/A
17. Rotate part 180 degrees on plane	N/A
18. Load and run program 021 and 022	N/A
19. Separate parts by cutting along mark scribed during machining process	N/A

20.	Install 100230 jig plate into CNC straddling vices and lock down	N/A
21.	Using a soft face hammer, tap the jig down to ensure it is seated	N/A
22.	Zero table using standard practices	N/A
23.	Mount separated part on jig using 1/4" bolts	N/A
24.	Load and run program 023	N/A
25.	Using vertical band saw, remove tooling lug at the outboard end	N/A
26.	On manual mill, zero off the end of the part using standard machining practices	N/A
27.	Using standard practices, machine surface area from which lug was removed	N/A
28.	Inspect finish and dimensions of final part.	N/A

Rack Base Assembly

29.	Insert Helicoils in threaded bushings IAW drawing 100226	
30.	Install bike rack base beams into jig fixture	N/A
31.	Install rails into beams	
32.	Weld IAW drawing 100215	
33.	Inspect finish and dimensions of final part.	
34.	Tag completed parts IAW Aero Design MPM.	

DRM

Material Purchase Order Number 17059 step extrusion
 Batch Quantity 48 total

~~24 LH~~ 28 LH JC.
~~24 RH~~ 20 RH JC.



Aero Design Ltd.

Type: AS350 Bite Rack Rails Work Order: 2017-109

Task	By	Notes	Date
End caps and bushings welded to (6) L/H and (6) R/H rails			Aug 14/2017
Helicoils installed in (6) L/H and (6) R/H rails			Aug 15/17
End caps and bushings welded (2) R/H			March 9/18
End caps and bushings welded (10) L/H			March 9/18
Helicoils installed (1) R/H			March 9/18
Helicoils installed (9) L/H			March 9/18
HOLE STRIPPED (1) R/H / (1) L/H			March 9/18
SEE WO 2017-147 FOR REMAINDER 12 L/H AND 12 R/H			March 14/18

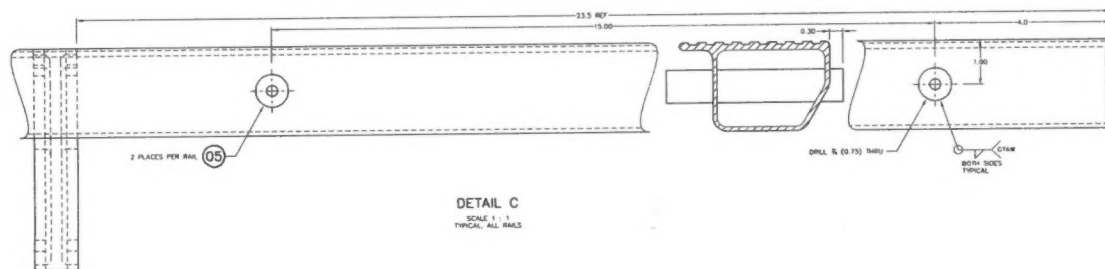
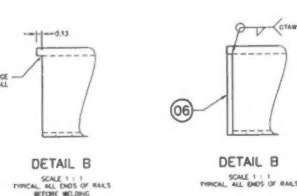
JC

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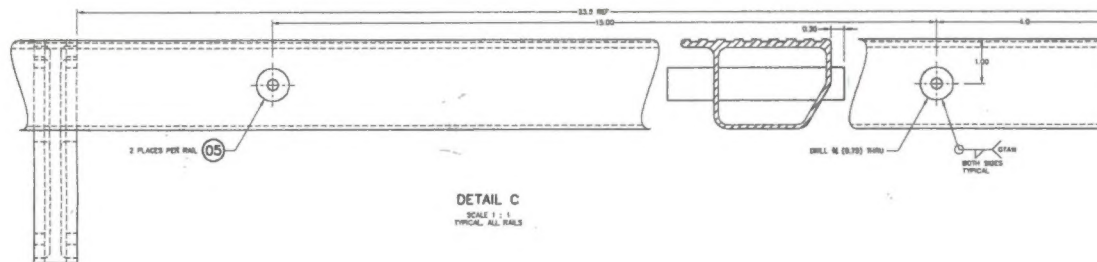
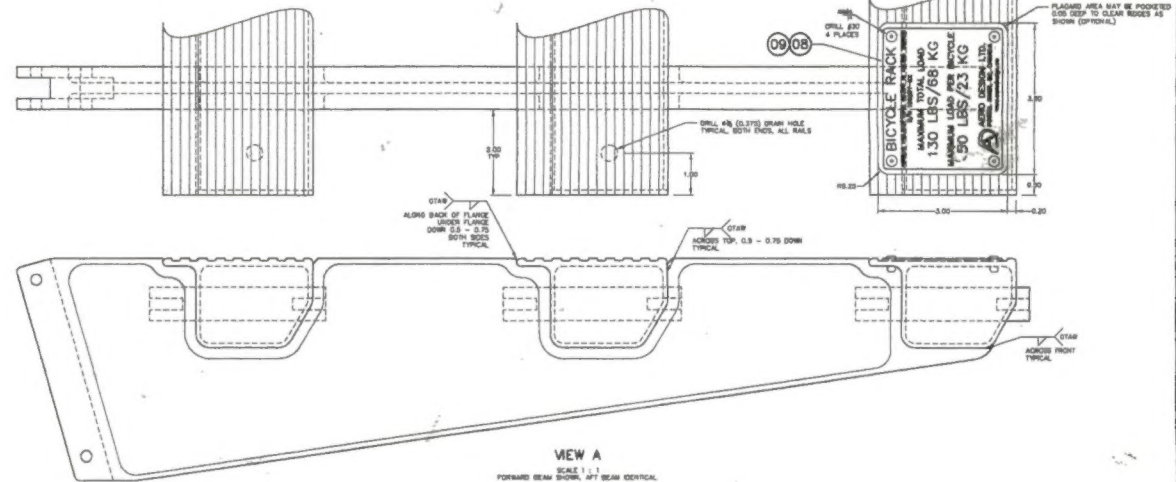
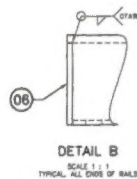
JC

[illegible]

Rails Only

NOT

- (02) RH RACK BASE
 (01) LH RACK BASE
 SCALE 1 : 4
 LH SHOWN, RH OPPOSITE

[illegible][illegible]